ECN 160B **Spring 2005**

University of CA, Davis
Department of Economics

Home Assignment 3 [HA3] **Due Date: 05.13.2005**

1. Multiple Choice Questions:

Please, record your answers in the table below (second column). Leave the third empty column for grading.

Question #	Your Answer	
1	A	404
2	E	390-391
3	C	390
4	C	392
5	A	395
6	C	394-395
7	A	431
8	E	392
9	B	400
10	E	408-409
11	A	380
12	E	360
13	E	359
14	D	359
15	D	362
16	C	362-363
17	D	371-373
18	C	374
19	D	374
20	E	373-375

Chapter 15:

1. Which of the following statements is the most accurate? The law of one price states:
   - **A. In competitive markets free of transportation costs and official barriers to trade, identical goods sold in different countries must sell for the same price when their prices are expressed in terms of the same currency.**
   - B. In competitive markets free of transportation costs and official barriers to trade, identical goods sold in the same country must sell for the same price when their prices are expressed in terms of the same currency.
   - C. In competitive markets free of transportation costs and official barrier to trade, identical goods sold in different countries must sell for the same price.
   - D. Identical goods sold in different countries must sell for the same price when their prices are expressed in terms of the same currency.
   - E. None of the above.

2. Which of the following statements is the most accurate?
   - A. The law of one price applies only to the general price level.
   - B. The law of one price applies to the general price level while PPP applies to individual commodities.
   - C. The law of one price applies to individual commodities while PPP applies to both the general price level and to individual commodities.
   - D. PPP applies only to individual commodities.
   - **E. The law of one price applies to individual commodities while PPP applies to the general price level.**

3. Which of the following statements is the most accurate?
   - A. If PPP holds true, then the law of one price holds true for every commodity as long as the reference baskets used to reckon different countries' price levels are the same.
   - B. If the law of one price holds true for every commodity, PPP must hold automatically.
   - **C. If the law of one price holds true for every commodity, PPP must automatically hold as long as the reference baskets used to reckon different countries' price levels are the same.**
   - D. If the law of one price does not hold true for every commodity, PPP cannot be true as long as the reference baskets used to reckon different countries' price levels are the same.
   - E. None of the above statements is true.

4. Which of the following statements is the most accurate?
   - A. Relative PPP is valid even when absolute PPP is not, provided the factors causing deviations from absolute PPP are more or less stable over different commodities space.
   - B. Absolute PPP is valid even when relative PPP is not, provided the factors causing deviations from relative PPP are more or less stable over time.

C. Relative PPP is valid even when absolute PPP is not, provided the factors causing deviations from absolute PPP are more or less stable over time.

D. Relative PPP is not valid when absolute PPP is not.

E. None of the above statements is true.

5 If people expect relative PPP to hold,

A. the difference between the interest rates offered by dollar and euro deposits will equal the difference between the inflation rates expected, in the United States and Europe, over the relevant horizon.

B. the difference between the interest rates offered by dollar and euro deposits will equal the difference between the inflation rates expected in Europe and the United States.

C. the difference between the interest rates offered by dollar and euro deposits will equal the difference between the inflation rates expected, over the relevant horizon, in the United States and Europe, in the short run.

D. the difference between the interest rates offered by dollar and euro deposits will be above the difference between the inflation rates expected, over the relevant horizon, in the United States and Europe.

E. None of the above statements is true.

6. Under PPP,

A. a rise in a country's expected inflation rate will eventually cause a more-than proportional rise in the interest rate that depositors of its currency offer in order to accommodate for the higher inflation.

B. a fall in a country's expected inflation rate will eventually cause an equal rise in the interest rate that depositors of its currency offer.

C. a rise in a country's expected inflation rate will eventually cause an equal rise in the interest rate that depositors of its currency offer.

D. a rise in a country's expected inflation rate will eventually cause a less than proportional rise in the interest rate that depositors of its currency offer to accommodate the rise in expected inflation.

E. None of the above statements is true.

7. Under sticky prices,

A. a fall in the money supply raises the interest rate to preserve money market equilibrium.

B. a fall in the money supply reduces the interest rate to preserve money market equilibrium.

C. a fall in the money supply keeps the interest rate intact to preserve money market equilibrium.

D. a fall in the money supply does not affect the interest rate in the short run, only in the long run.

E. None of the above statements is true.

8. Under the monetary approach to the exchange rate,

A. an interest rate decrease is associated with higher expected inflation and a currency that will be weaker on all future dates.
B. an interest rate increase is associated with higher expected deflation and a currency that will be weaker on all future dates.
C. an interest rate increase is associated with higher expected inflation and a currency that will be strengthened on all future dates.
D. an interest rate increase is associated with higher expected deflation and a currency that will be strengthened on all future dates.
E. **an interest rate increase is associated with higher expected inflation and a currency that will be weaker on all future dates.**

9. Which of the following statements is the most accurate?
A. Relative PPP is not a reasonable approximation to the data.
B. **Relative PPP is sometimes a reasonable approximation to the data but usually performs poorly.**
C. Relative PPP is sometimes a reasonable approximation to the data.
D. PPP is sometimes a reasonable approximation to the data.
E. PPP is sometimes a reasonable approximation to the data but usually performs poorly.

10. Which one of the following statements is the most accurate?
A. Departures from PPP are similar in both the short run and long run.
B. Departures from PPP are even greater in the long run than in the short run.
C. Departures from PPP are smaller in the long run than in the long run.
D. It is hard to tell whether departures from PPP are greater in the short run than in the long run.
E. **Departures from PPP are even greater in the short run than in the long run.**

Chapter 14:

11) In a classic paper, Columbia University economist Phillip Cagan drew the line between inflation and hyperinflation at an inflation rate of
A. 50 percent per month.
B. 10 percent per month.
C. 20 percent per month.
D. 5 percent per month.
E. 25 percent per month.

12) The family summer house on Cape Code pays a return in the form of

A. interest rate.
B. capital gains.
C. the pleasure of vacations at the beach.
D. A, B and C.
E. B and C only.

13) Money includes
A. currency.
B. bank deposits on which check may be written.
C. both A and B.
D. travelers' checks.
E. A, B and D.

14) Individuals base their demand for an asset on
A. the expected return the asset offers compared with the returns offered by other assets.
B. the riskiness of the asset's expected return.
C. the asset's liquidity.
D. All of the above.
E. Only A and B.

15) The aggregate real money demand schedule L(R,Y)
A. slopes upward because a fall in the interest rate raises the desired real money holdings of each household and firm in the economy.
B. slopes downward because a fall in the interest rate reduces the desired real money holdings of each household and firm in the economy.
C. has a zero slope because a fall in the interest rate keeps constant the desired real money holdings of each household and firm in the economy.
D. slopes downward because a fall in the interest rate raises the desired real money holdings of each household and firm in the economy.
E. None of the above.

16) A rise in
A. real GNP decreases aggregate real money demand for a given interest rate, moving the L(R,Y) schedule to the right.
B. real GNP raises aggregate real money demand for a given interest rate,
moving the L(R,Y) schedule to the left.
C. real GNP raises aggregate real money demand for a given interest rate, moving the L(R,Y) schedule to the right.
D. nominal GNP raises aggregate real money demand for a given interest rate, moving the L(R,Y) schedule to the right.
E. real GNP raises aggregate nominal money demand for a given interest rate, moving the L(R,Y) schedule to the right.

17) Given P_{US} and Y_{US}
A. an increase in the European money supply causes the euro to appreciate against the dollar, but it does not disturb the U.S. money market equilibrium.
B. an increase in the European money supply causes the euro to depreciate against the dollar, and it creates excess demand for dollars in the U.S. money market.
C. an increase in the European money supply causes the euro to depreciate against the dollar, and it creates excess demand for dollars in the U.S. money market.
D. an increase in the European money supply causes the euro to depreciate against the dollar, but it does not disturb the U.S. money market equilibrium.

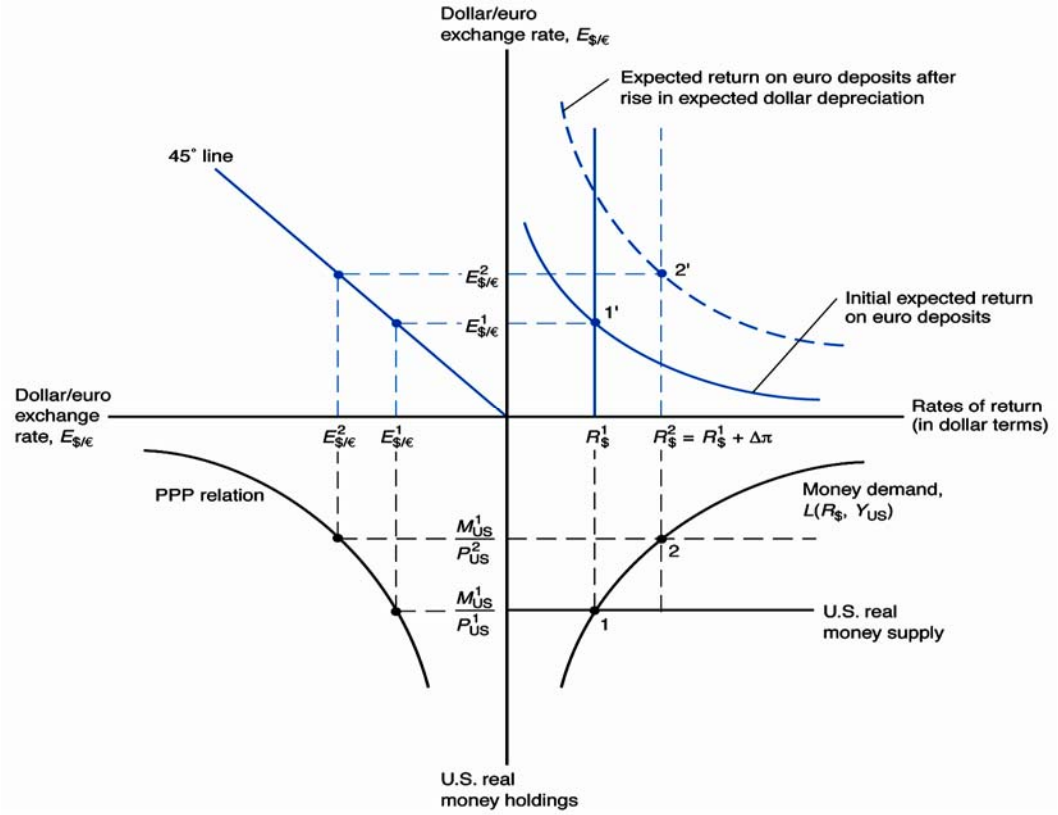
E. None of the above statements is true.

18) An increase in a country's money supply
A. causes a more than proportional increase in its price level.
B. causes a less than proportional increase in its price level.
C. causes a proportional increase in its price level.
D. leaves its price level constant in long-run equilibrium.
E. None of the above.

19) Changes in the money supply growth rate
A. are neutral in the short run.
B. need not be neutral in the short run.
C. are neutral both in the short and long run.
D. are neutral in the long run.
E. need not be neutral in the long run.

20) In a world where the price level could adjust immediately to its new long-run level after a money supply increase
A. the dollar interest rate would increase because prices would adjust immediately and prevent the money supply from rising.
B. the dollar interest rate would fall because prices would adjust immediately and prevent the money supply from rising.
C. the dollar interest rate would fall because prices would adjust immediately and prevent the money supply from decreasing.
D. the dollar interest rate would decrease because prices would adjust immediately and prevent the money supply from decreasing.
E. None of the above.

2. To answer the following question, please refer to the figure below. Concentrating only at the upper right quadrant, discuss the foreign exchange market equilibrium.



3. KO, Chapter 14, problems 1, 4.

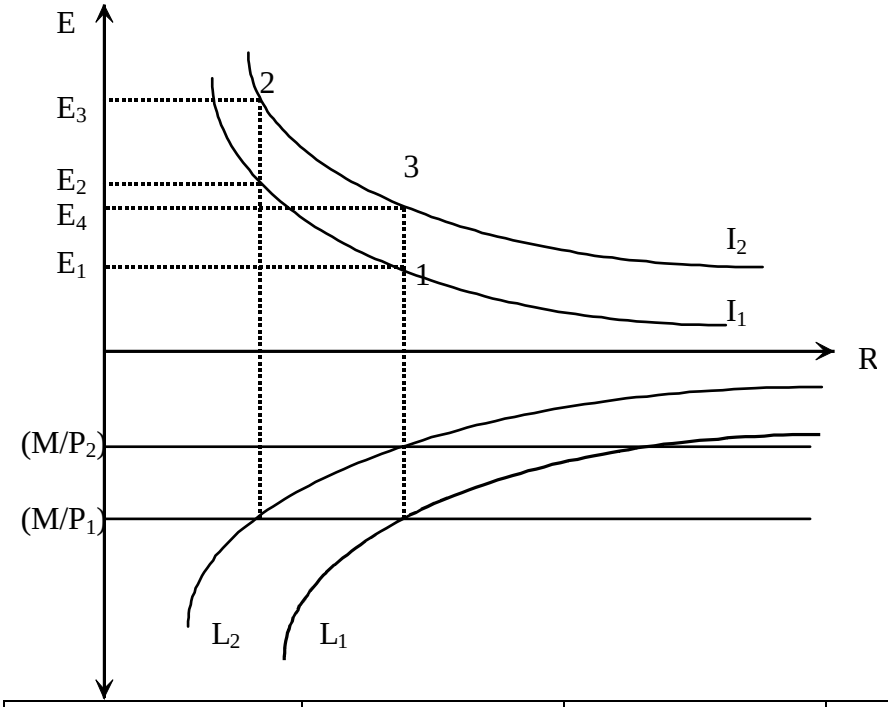
4. KO, Chapter 15, problems 1, 2, 7, 12, 13

5. Using a figure describing both the U.S. money market and the foreign exchange market, analyze the effects of a temporary increase in the European money supply on the dollar/euro exchange rate.

3. KO, Chapter 14, problem 1.

In the figure below, the reduction in aggregate real money demand is depicted as a backward shift in the money demand schedule from L_1 to L_2. Its immediate effect is depreciation of the exchange rate from E_1 to E_2, if the reduction in money demand is temporary, or depreciation to E_3, if the reduction is permanent. Impact of a permanent reduction in money demand is larger, because this change affects the future exchange rate, via the change in foreign exchange market expectations. In the long run, the price level rises to bring the real money supply in line with real money demand, leaving relative prices, output, and the nominal interest rate the same, thus, depreciating the domestic currency in proportion to the fall in real money demand. The long-run level of real balances (M/P_2) is a level, where the interest rate in the long-run equals its initial value. The dynamics of adjustment to a permanent reduction in money demand: from the initial point 1 (the exchange rate is E_1), immediately to point 2 (the exchange rate is E_3).

Then, the price level increases over time to the new long-run position at point 3 (the exchange rate is E_4).



	Initial	SR	LR
Exchange Rate	**E_1**	**$E_{SR}=E_3> E_1$**	**$E_{LR}=E_3> E_4> E_1$**
Interest Rate	**R_1**	**$R_{SR}=R_2<R_1$**	**$E_{LR}= R_1$**
Price Level	**P_1**	**$P_{SR}=P_1$**	**$P_{LR}=P_2> P_1$**

3. KO, Chapter 14, Problem 4.

Answer: An increase in domestic real GNP increases the demand for money at any nominal interest rate. This is reflected in figure 14-2 as an outward shift in the money demand function from L_1 to L_2. The effect of this is to raise domestic interest rates from R_1 to R_2 and to cause an appreciation of the domestic currency from E_1 to E_2.

4. KO, Chapter 15:

1. Relative PPP predicts that inflation differentials are matched by changes in the exchange rate. Under relative PPP, the franc/ruble exchange rate would fall by 95 percent with inflation rates of 100 percent in Russia and 5 percent in Switzerland.

2. A real currency appreciation may result from an increase in the demand for nontraded goods relative to tradables which would cause an appreciation of the exchange rate since the increase in the demand for nontradables raises their price, raising the domestic price level and causing the currency to appreciate. In this case exporters are indeed hurt, as one can see by adapting the analysis in Chapter 3. Real currency appreciation may occur

for different reasons, however, with different implications for exporters' incomes. A shift in foreign demand in favor of domestic exports will both appreciate the domestic currency in real terms and benefit exporters. Similarly, productivity growth in exports is likely to benefit exporters while causing a real currency appreciation. If we consider a ceterus paribus increase in the real exchange rate, this is typically bad for exporters as their exports are now more expensive to foreigners which may reduce foreign export demand. In general, though, we need to know why the real exchange rate changed to interpret the impact of the change.

7. A permanent shift in the real money demand function will alter the long-run equilibrium nominal exchange rate, but not the long-run equilibrium real exchange rate. Since the real exchange rate does not change, we can use the monetary approach equation, $E = (M/M^*)\cdot\{L(R^*,Y^*)/L(R,Y)\}$. A permanent increase in money demand at any nominal interest rate leads to a proportional appreciation of the long-run nominal exchange rate. Intuitively, the level of prices for any level of nominal balances must be lower in the long run for money market equilibrium. The reverse holds for a permanent decrease in money demand. The real exchange rate, however, depends upon relative prices and productivity terms which are not affected by general price-level changes.

12. A permanent increase in the expected rate of real depreciation of the dollar against the euro leads to a permanent increase in the expected rate of depreciation of the nominal dollar/euro exchange rate, given the differential in expected inflation rates across the US and Europe. This increase in the expected depreciation of the dollar causes the spot rate today to depreciate.

13. Suppose there is a temporary fall in the real exchange rate in an economy, that is the exchange rate appreciates today and then will depreciate back to its original level in the future. The expected depreciation of the real exchange rate, by real interest parity, causes the real interest rate to rise. If there is no change in the expected inflation rate then the nominal interest rate rises with the rise in the real exchange rate. This event may also cause the nominal exchange rate to appreciate if the effect of a current appreciation of the real exchange rate dominates the effect of the expected depreciation of the real exchange rate.

5. Using a figure describing both the U.S. money market and the foreign exchange market, analyze the effects of a temporary increase in the European money supply on the dollar/euro exchange rate.

Answer: An increase in the European money supply will reduce the interest rate on the euro and thus will cause the schedule of the expected euro return expressed

in dollars to shift down, causing a reduction in the dollar/euro exchange rate, that is, an appreciation of the U.S. Dollar. The euro depreciates against the dollar. The U.S. money demand and money supply are not going to be affected, and thus the interest rate in the U.S. will remain the same.